WHAT IS CLAIMED IS:

1. A sensor array for detecting an analyte in a fluid, said sensor array comprising: first and second sensors wherein said first sensor comprises a region of aligned conductive material; and wherein said sensor array is electrically connected to an electrical measuring apparatus.

2. The sensor array for detecting an analyte in a fluid in accordance with claim 1, wherein said first and said second sensors are first and second chemically sensitive resistors, each of the chemically sensitive resistors comprising: a plurality of alternating regions comprising a nonconductive region and an aligned conductive region that is compositionally different than the nonconductive region, wherein each resistor provides an electrical path through said nonconductive region and the aligned conductive region; a first electrical resistance when contacted with a first fluid comprising an analyte at a first concentration; and a second electrical resistance when contacted with a second fluid comprising said analyte at a second different concentration.

3. The sensor array for detecting an analyte in a fluid in accordance with claim 1, wherein said conductive region is aligned by exposure to a member selected from the group consisting of an electric field, a thermal field, a magnetic field, an electromagnetic field, a photoelectric field, a light field, a mechanical field, and combinations thereof.

4. The sensor array for detecting an analyte in a fluid in accordance with claim 3, wherein said conductive region is electrically aligned.

5. The sensor array for detecting an analyte in a fluid in accordance with claim 3, wherein said conductive region is magnetically aligned.

6. The sensor array for detecting an analyte in a fluid in accordance with claim 3, wherein said conductive region is photolytically aligned.

7. The sensor array for detecting an analyte in a fluid in accordance with claim 1, wherein said aligned conductive material is a member selected from the

group consisting of metal, magnetic alloys, ceramics, oxides, intermetallic compounds, carbon black, nanoparticles and composite materials.

8. The sensor array for detecting an analyte in a fluid in accordance with claim 7, wherein said conductive material comprises carbon black.

9. The sensor array for detecting an analyte in a fluid in accordance with claim 7, wherein said conductive material comprises a nanoparticle.

10. The sensor array for detecting an analyte in a fluid in accordance with claim 7, wherein said conductive material comprises a metal.

11. The sensor array for detecting an analyte in a fluid in accordance with claim 10, wherein said metal is a member selected from the group consisting of nickel, cobalt, iron, a ferrite and their magnetic alloys.

12. The sensor array for detecting an analyte in a fluid in accordance with claim 10, wherein said metal is a coating of a substrate, said substrate is a member selected from group consisting of glass, silicon, quartz, ceramic or combination thereof.

13. The sensor array for detecting an analyte in a fluid in accordance with claim 10, wherein said metal is a member selected from the group consisting of a precious metal coating and precious metal alloys.

14. The sensor array for detecting an analyte in a fluid in accordance with claim 13, wherein said precious metal coating is a member selected from the group consisting of silver, gold and platinum.

15. The sensor array for detecting an analyte in a fluid in accordance with claim 7, wherein said conductive region is an oxide.

16. The sensor array for detecting an analyte in a fluid in accordance with claim 15, wherein said conductive region is a member selected from the group consisting of In_2O_3, SnO_2, $Na_xPt_3O_4$, TiO_2 and $BaTiO_3$.

17. The sensor array for detecting an analyte in a fluid in accordance with claim 1, wherein said aligned region is a material selected from the group consisting of copper phthalocyanine and phenothiazine.

18. A system for detecting an analyte in a fluid, said system comprising:

a sensor array comprising first and second sensors wherein said first sensor comprises a region of aligned conductive material which provides a response in the presence of said analyte;

an electrical measuring device electrically connected to the sensor array;

and a computer comprising a resident algorithm; the electrical measuring device detecting the response and the computer assembling the response into a sensor array response profile.

19. The system for detecting an analyte in a fluid in accordance with claim 18, wherein said first and said second sensors are first and second chemically sensitive resistors, each chemically sensitive resistor comprising a plurality of alternating regions comprising a nonconductive region and an aligned conductive region that is compositionally different than said nonconductive region wherein,

each resistor provides an electrical path through said nonconductive region and said aligned conductive region, a first electrical resistance when contacted with a first fluid comprising an analyte at a first concentration and a second different electrical resistance when contacted with a second fluid comprising said analyte at a second different concentration wherein,

the difference between said first electrical resistance and said second electrical resistance of said first chemically sensitive resistor being different from the difference between said first electrical resistance and said second electrical resistance of said second chemically sensitive resistor under the same conditions; and

the electrical measuring device detecting the first and said second electrical resistances in each of said chemically sensitive resistors and the computer assembling the resistances into a sensor array response profile.

20. The system for detecting an analyte in a fluid in accordance with claim 18, wherein said conductive region is aligned by exposure to a member selected

from the group consisting of an electric field, a thermal field, a magnetic field, an electromagnetic field, a photoelectric field, a light field or combinations thereof.

21. The system for detecting an analyte in a fluid in accordance with claim **20**, wherein said conductive region is electrically aligned.

22. The system for detecting an analyte in a fluid in accordance with claim **20**, wherein said conductive region is magnetically aligned.

23. The system array for detecting an analyte in a fluid in accordance with claim **20**, wherein said conductive region is photolytically aligned.

24. A method for detecting the presence of an analyte in a fluid, said method comprising:

providing a sensor array comprising first and second sensors, wherein said first sensor comprises a region of aligned conductive material; and

contacting said sensor array with said analyte to produce a response thereby detecting the presence of the analyte.

25. The method for detecting an analyte in a fluid in accordance with claim **24**, wherein said first and said second sensors are first and second chemically sensitive resistors each comprising a plurality of alternating regions comprising a nonconductive region, and an aligned conductive region that is compositionally different than the nonconductive material, and wherein each resistor provides an electrical path through said nonconducting regions and aligned conductive regions, a first electrical resistance when contacted with a first fluid comprising an analyte at a first concentration and a second different electrical resistance when contacted with a second fluid comprising said analyte at a second different concentration.

26. The method for detecting an analyte in a fluid in accordance with claim **24**, wherein said conductive region is electrically aligned.

27. The method for detecting an analyte in a fluid in accordance with claim **24**, wherein said conductive region is magnetically aligned.

28. The method for detecting an analyte in a fluid in accordance with claim 24, wherein said conductive region is photolytically or mechanically aligned.